REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1, 3, 14, 15 and 20-25 are now present in the application. No claims have been amended in this Reply. Claims 1 and 21 are independent. Reconsideration of this application is respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

Claims 1, 3, 14, 15 and 20-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Crisp, U.S. Patent No. 6,799,085, in view of Dosch, U.S. Patent No. 3,148,687. This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Independent claims 1 and 21 recite a combination of elements including "[a] regenerative water supply controller [of a dish washer]...comprising/including: a memory part storing information of preset hardness values of the washing water and supplying time periods of the regenerative water to the ion exchange resin corresponding to the respective preset hardness values; an input part providing the hardness value of the washing water; and a controlling part retrieving the supplying time period of the regenerative water from the memory part corresponding to the provided hardness value from the input part, and controlling the regenerative water supply part to supply the regenerative water to the ion exchange resin for the supplying time period of the regenerative water retrieved from the memory part."

In particular, Crisp simply discloses an appliance supply distribution, dispensing and use system and method without addressing the claimed feature of controlling a supplying time period

of a regenerative water corresponding to a hardness value of a washing water in a dish washer.

In fact, Crisp simply discloses the system can dispense one type of washing detergent (from a

plurality of different detergents) when different washing cycles are used (see col. 8, lines 49-53)

and the user may touch selections 42 to dispense a supply or to cause the appliance to dispense a

supply, such as one type of dishwashing soap in a dishwasher (see col. 9, lines 1-6.) However,

Crisp nowhere discloses supplying a regenerative water to a dish water for a predetermined time

period corresponding to the hardness value of the washing water as recited in original claim 1.

Although the Examiner alleged that the hard water is known to clog pipes and to

complicate soap and detergent dissolving in water, utilizing the controlled dispensing system of

Crisp with a regenerative water supply part will still fail to achieve the present invention. In

particular, even if Crisp's system can supply a regenerative water, assuming *arguendo*, Crisp's

system still fails to teach controlling the regenerative water supply part to supply the regenerative

water for the supplying time period of the regenerative water corresponding to the hardness value.

One of the drawbacks the present invention has overcome is to precisely control the amount of

the regenerative water corresponding to the hardness level of the washing water (see paragraph

0013.) By simply dispensing the regenerative water without precisely controlling the amount of

the regenerative water (e.g., dispensing the regenerative water for a fixed amount every time),

the performance of the ion exchange resin may not be effectively restored or the excessive

amount of the regenerative water is wasted due to the variance of the water hardness level.

Furthermore, although the Examiner alleged that Crisp's supply dispensing computer has

a memory and that a memory is well known in the art to hold data and numerical values such as

look-up tables, Crisp does not explicitly teach that the data, numerical values or look-up tables

are the preset hardness values and the supplying time periods of the regenerative water corresponding to the respective preset hardness values as recited in claims 1 and 21.

Crisp also fails to <u>inherently</u> teach that the data, numerical values or look-up tables are the preset hardness values and the supplying time periods of the regenerative water corresponding to the respective preset hardness values as recited in claims 1 and 21. In fact, under the doctrine of inherency, if an element is not expressly disclosed in a prior art reference, the reference will still be deemed to anticipate a subsequent claim if the missing element "is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Cont'l Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). "Inherent anticipation requires that the missing descriptive material is 'necessarily present,' not merely probably or possibly present, in the prior art." *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) (quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)).

Here, the data, numerical values or look-up tables stored in Crisp's supply dispensing computer may simply be the amount of the supply 22 (see col. 7, lines 14-16) or the supply order to the order processing system 14 (see col. 7, lines 17-25), and does *not necessarily* have to be the preset hardness values and the supplying time periods of the regenerative water corresponding to the respective preset hardness values as recited in claims 1 and 21. Therefore, Crisp fails to inherently teach "a memory part *storing information of preset hardness values* of the washing water and *supplying time periods of the regenerative water* to the ion exchange resin *corresponding to the respective preset hardness values*" as recited in claims 1 and 21.

Applicants respectfully submit that Crisp also fails to teach that the order processing system 14 (referred to by the Examiner as the controller) retrieves the data, numerical values or

look-up tables from the supply dispensing computer 24 to supply the regenerative water for a particular supplying time period based on the retrieved data, numerical values or look-up tables. In particular, Crisp in col. 7, lines 17-25 discloses:

> When the supply 22 reaches a predetermined depletion level or if a user makes an input or request, *the appliance or dispensing computer 24 transmits a supply order to the order processing system 14*. The order processing system 14 processes the order, and if acceptable, transmits the order along communication channel 20 to the supplier system 18. The supplier system 18 then delivers supply 22 to the appliance 12.... (Emphasis added).

In other words, the order processing system 14 simply receives the supply order from the supply dispensing computer 24. However, the order processing system 14 does not use the supply order to supply the regenerative water for a particular supplying time period based on the supply order. Therefore, even if Crisp's system can supply a regenerative water, assuming *arguendo*, it still fails to teach "a *controlling part retrieving the supplying time period of the regenerative water from the memory part* corresponding to the provided hardness value from the input part, *and controlling the regenerative water supply part to supply the regenerative water to the ion exchange resin for the supplying time period of the regenerative water retrieved from the memory part*" as recited in claims 1 and 21.

With regard to the Examiner's reliance on Dosch, this reference has only been relied on for its teachings related to an ion exchange resin. This reference also fails to disclose the above combination of elements as set forth in independent claims 1 and 21. Accordingly, this reference fails to cure the deficiencies of Crisp.

In addition, claims 3, 14, 15, 20 and 22-25 depend, either directly or indirectly, from independent claims 1 and 21, and are therefore allowable based on their respective dependence from independent claims 1 and 21, which are believed to be allowable.

In view of the above, Applicants respectfully submit that claims 1, 3, 14, 15 and 20-25 clearly define the present invention over the reference relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103 are respectfully requested.

CONCLUSION

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated:

MAY 2 1 2008

Respectfully submitted,

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